

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 5-10, 15-20, and 25-30 have been withdrawn from consideration.

This amendment cancels claims 19-20 and 29-30.

Previously examined claims have been amended.

New claims have been added which read on the elected species of Figures 1-3.

There are no formal matters outstanding.

The Abstract has been amended.

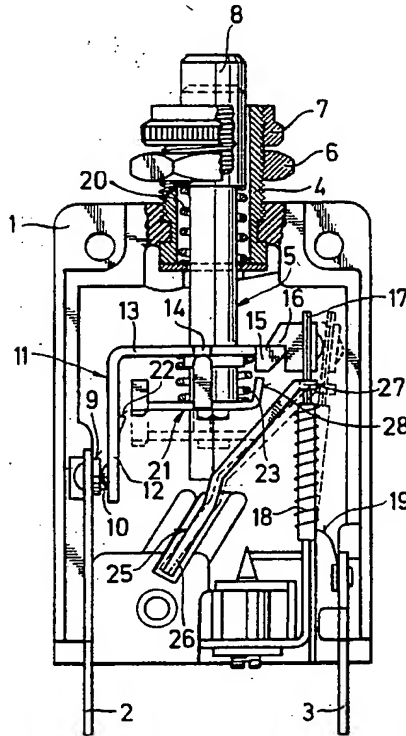
The examined claims were all rejected as anticipated by KRASSER 4,166,993.

Applicant respectfully disagrees.

KRASSER does not disclose a sealed housing. The claims have been amended to make explicit that a sealed housing requires an airtight sealed housing sealing a fixed amount of air within the housing.

Indeed, KRASSER makes no mention of the disclosed switch comprising an airtight sealed housing. Nor is there any reason to suspect that the disclosed switch would be airtight. Nor is there any apparent advantage to making the disclosed switch of KRASSER to include an airtight housing.

KRASSER does not disclose a movable fin that protrudes to the outside of said sealed housing, outward movement of the fin being caused by a rise in internal temperature of said sealed housing. Figure 1 is reproduced below.



The Official Action reads the recitation of sealed housing onto housing element 1 above and the movable fin onto button 8 above. Under the "DESCRIPTION OF THE PREFERRED EMBODIMENTS", it is disclosed that a switch is mounted in a plastic housing 1 with connecting posts 2, 3 and a passage sleeve 4 for a switching rod 5 mounted in the housing 1.

It is further disclosed that the end of the connecting post 2 is provided with a contact piece 9. In the switched-on state of the switch, a further contact piece 10 rests against

this contact piece 9, piece 10 being fastened to an angular contact bridge 11. The free end of arm 13 carries a contact piece 15 which engages under a hook-shaped contact tongue 16 that is disposed at the free end of a bimetal strip 17. The contact tongue 16 is in electrically conductive connection with the heating conductor 18 of the bimetal strip and the other end 19 of the heating conductor is connected to the outwardly directed connecting terminal 3. In the above-illustrate switched-on state, current can thus flow only through the connecting terminal 2, the contact pieces 9 and 10, the contact bridge 11, the contact piece 15, the contact tongue 16, the heating conductor 18 and connecting terminal 3.

As per column 2, beginning at line 45, if the current flowing through these components exceeds a given desired value, the bimetal strip 17 will bend due to being heated to the extent that it takes on the position shown in broken lines. As a result, the contact tongue 16 escapes toward the right and releases contact piece 15. This in turn causes the contact bridge 11 together with the switching rod 5 and the parts fastened thereto, to be lifted upwardly by the force exerted by a spring 20 surrounding rod 5 and compressed between an abutment fixed to the housing 1 and a shoulder on button 8.

From the above, it is clear that the KRASSER does not disclose that the outward movement of the button 8 depends on a rise in internal temperature of said sealed housing. Rather, it

is the current flowing through the electrical components exceeding a given value that causes the bimetal strip 17 to bend and thereby move the button 8. There is no indication that the housing even changes temperature. There is clearly no relationship between the temperature of housing 1 and movement of button 8.

Thus, claim 1 is neither anticipated nor rendered obvious by KRASSER.

See also new claim 31 which recites an airtight sealed housing sealing a fixed amount of air within the housing. This is not disclosed by KRASSER.

See the paragraph spanning specification pages 7-8: "..., heat generated in the package 4 inside the sealed housing is conducted to the inner periphery of the heat radiation fins 6 of the body 1. ... In this embodiment, when the atmospheric pressure inside the sealed housing increases due to a change in external environment or internal calorific value of the housing, a force exerting to force out the housing inner side of the movable fin 7 against the spring 11 increases so that the movable fin 7 is moved toward the outside of the housing."

Claim 31 also recites a movable fin that protrudes to the outside of the sealed housing, outward movement of the fin being caused by a rise in internal pressure of the sealed air acting on an housing inside surface of the fin, wherein, heat generated by the electrical circuit component causes an increase

of an internal temperature of the sealed housing and the increased internal temperature of the sealed housing causes the increase in internal pressure of the sealed air. This is not disclosed by KRASSER.

See amended claims 2-3.

Claim 2 recites "said movable fin protrudes to the outside of said sealed housing through a guide hole formed in said sealed housing, and has airtightness means between itself and said guide hole".

The Official Action has offered KRASSER passage sleeve 4 as the recited airtightness means. But there is no disclosure that sleeve 4 provides airtightness and therefore this recited feature is not anticipated.

Claim 2 now recites that the outward movement of the fin depends on an atmospheric pressure increase inside the sealed housing acting against a housing inner side of the fin. KRASSER also does not disclose this.

Claim 3 recites the heat generating portion of a package being connected to the movable fin by a flexible sheet.

The Official Action reads the flexible sheet onto contact bridge 11 of KRASSER. Although bridge 11 itself moves (compare Figure 1 to Figure 2), there is no disclosure found that bridge 11 is flexible. Without such disclosure, this feature cannot be said to be anticipated.

Claim 3 also recites "an internal calorific value increase of the housing causes an atmospheric pressure increase inside the sealed housing and the increased atmospheric pressure acts against a housing inner side of the fin to provide a force causing the outward movement of the fin".

Claim 4 now recites "a return spring located intermediate the housing and the fin, the return spring acting to move the fin into the housing". See return spring 11 in Figures 1-3.

KRASSER does not disclose this further feature.

Claim 11 is similar and recites "wherein, an internal calorific value increase of the housing causes an atmospheric pressure increase inside the sealed housing and the increased atmospheric pressure acts against a housing inner side of the fin to provide a force causing the outward movement of the fin".

These structures are not disclosed by KRASSER.

Claim 21 recites a sealed airtight housing sealing a fixed amount of air within the housing, where a movable fin protrudes to the outside of the housing through a guide hole, an outward movement of the fin depending on a rise in internal pressure of air sealed within the housing, the rise in internal pressure caused by a rise in internal temperature of the sealed housing.

These features are not taught by KRASSER.

New claim 32 recites "a body and a cover joined together via a packing to form a sealed housing that airtight seals a fixed amount of air within the housing". KRASSER does not disclose this.

Claim 32 further recites "movable heat radiation fins that protrudes to the outside of the sealed housing, outward movement of the fins being caused by a rise in internal pressure of the sealed air acting on an housing inside surface of the fins" KRASSER does not disclose this.

Claim 32 further recites that "the package is in contact with an inner periphery of heat radiation fins forming part of an inner periphery of the body, via the heat conductive member, the contact providing a path to radiate heat generated by the electrical circuit components". KRASSER does not disclose this.

Claims 33 and 34 recite "a body and a cover joined together and forming a sealed housing that airtight seals a fixed amount of air within the housing". KRASSER does not disclose this.

Claims 33 and 34 further recite "movable heat radiation fins protruding through an outside of the cover, outward movement of the fins being caused by a rise in an internal pressure acting on an housing inside surface of the fins". KRASSER does not disclose this.

Claim 35 recites "return springs located intermediate the cover and each fin, the return springs acting to move the fins into the housing". KRASSER does not disclose this.

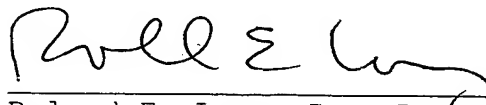
From the above, applicant believes it is clear that the present invention has been recited in a manner which is both novel and non-obvious over the prior art. Accordingly, reconsideration and allowance of all the pending claims are respectfully requested.

Applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item(s):

- ☐ - a terminal disclaimer
- ☐ - a 37 CFR 1.132 Declaration
- ☒ - a new or amended Abstract of the Disclosure
- ☐ - a Replacement Sheet for Figure of the drawings
- ☐ - a Substitute Specification and a marked-up copy of the
originally-filed specification
- ☐ - a verified English translation of foreign priority document